THE RELATIONSHIP BETWEEN DEPRESSION AND SELF-MUTILATION IN ADOLESCENCE

by

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ABSTRACT

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The importance of the relationship between depression and self-mutilation in the adolescent population is becoming more apparent. Analysis of these two variables demonstrates that they are correlated with one another in the adolescent population. The present study examines the relationship between depression and self-mutilation. Two scales, the Beck Depression Inventory II (Beck, 1996) and the Self-Harm Survey (Conterio, Lader, & Bloom, 1998) were administered to participants and the scores were correlated to determine whether a relationship existed between the two variables. Participants were residents from a residential treatment center for adolescents.

Data analysis using Pearson's *r* correlation coefficients were used to determine if there was a positive correlation between depression and self-mutilation. The t-test for independent means was utilized to determine if there was a difference between gender

and self-mutilation, age and self-mutilation, as well as length of stay in the residential treatment facility and self-mutilation. The means and standard deviations were also determined for these variables. Statistical differences were indicated based on these findings. Implications of this study as well as recommendations for future studies on depression and self-mutilation were discussed in detail.

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CHAPTER I

Introduction

Self-Mutilation

Self-mutilation has recently become more prevalent in society. The occurrence of self-mutilation in the general public includes over two million Americans who regularly injure themselves intentionally and compulsively (Strong, 1998). Over the years, there has been an alarming rise in the number of people who feel compelled to handle life's frustrations by wounding their bodies (Strong, 1998). Self-mutilation is a very complex and often not understood occurrence. Self-mutilators, also known as "cutters", tend to take their cues from one another - particularly teens who often pick up the behavior from a classmate, a sibling, or someone else they know (Strong, 1998).

Self-mutilation can include many different ritualistic behaviors as well as many different explanations for the self-harm. Self-mutilation can be defined as using the following characteristic criteria: "a recurrent cutting or burning of one's skin; a sense of tension present immediately before the act is committed; relaxation, gratification, pleasant feelings, and numbness experienced with the physical pain; and a sense of shame and fear of social stigma, causing the individual to attempt to hide scars, blood, or other evidence of the acts of self-harm" (Levenkron, 1998, p.25). There have been a number of other terms used to describe self- mutilation. Some of the most common terms include deliberate self-harm, self-injurious behavior, self-harm, self-abuse, intentional injury, self-inflicted violence and symbolic wounding (Strong, 1998).

Self-mutilation is a relatively new phenomenon. It wasn't until the 1980's when many articles about self-mutilation began appearing in psychiatric journals. The

phenomenon of self-mutilation began to be accepted as more of a serious topic of study and less as a sideshow (Strong, 1998). The 1990's brought about the grunge look to society. The baggy pants, ripped T-shirts, messy hair, and tattooed and pierced skin seem to tell the world, "I don't feel good about myself" (Conterio, Lader, & Bloom 1998). When adolescents cultivated this look and attitude, it seemed less of a stretch for them to begin injuring themselves (Conterio et.al, 1998). This may be a reason why self-mutilation had taken such an insidious hold among teenagers. Adolescence is a time when teenagers start to achieve a real sense of themselves as independent and autonomous people, capable of making their own choices and decisions (Alderman, 1997).

The popularity of self-mutilation has become more widely known through the media and celebrities who have admitted to self-harming themselves. Popular television shows like Beverly Hills, 90210 and Seventh Heaven are giving exposure to the problem (Conterio et.al, 1998). This phenomenon made its first major public appearance in 1996, when Princess Diana confessed that the strain of her marriage had caused her to throw herself down the staircase and cut herself with razors, pens, knives, and lemon slicers (Levenkron, 1998). In Hollywood, celebrities like Roseanne and Johnny Depp have said in interviews that they struggled with the problem (Conterio et.al, 1998).

Self-mutilation in Adolescence

Self-mutilation has increased in the adolescent population. It is said that 1,400 out of every 100,000 people in the general population have engaged in some form of self-injury (Conterio et.al, 1998). The occurrence of self-mutilation in adolescence is even higher than in the general population. In clinics or institutional settings, this phenomenon

affects anywhere between six and thirty percent of youngsters (Hoghughi, 1992). In general terms, girls are likely to engage more frequently in milder forms of self-mutilation, and boys less often participate in this phenomenon (Hoghughi, 1992).

There are a number of reasons that adolescents will self-mutilate. The precipitating and maintaining factors include: relief from feelings; a method of coping; stopping, inducing, or preventing dissociation; euphoric feelings; physically expressing pain; communication; self-punishment; reenacting previous abuse and establishing control (Alderman, 1997). Self-mutilators report a range of negative feelings that occur immediately prior to an act of self-mutilation (Haines, Williams, Brain, Wilson, 1995). Many factors have been reported to precipitate these feelings; interpersonal conflict, rejection, separation, or abandonment are the most common (Feldman, 1988; Grunebaum & Klerman, 1967; Novotony, 1972; Rosenthal, Rinzler, Wallsh, Klausner, 1972; Simpson, 1975, 1976).

Self-mutilation is often a result of profound emotional pain. The injuries can release feelings of self-hatred, anger and anxiety, and can provide a way to take control. Often adolescents who self-mutilate do so in an attempt to try and release all the emotions they are feeling internally (Ross & McKay, 1979). Others may feel so numb that seeing their own blood when they cut themselves helps them to feel alive because they usually feel so dead inside (Ross & McKay, 1979). Individuals who self-mutilate often adopt the behavior because they have no other means of coping with their problems (Walsh & Rosen, 1988).

Self-mutilators often have other mental health problems. Many of these individuals often have a DSM- IV (American Psychiatric Association, 1994) diagnosis of

Major Depression, Anxiety/and or Panic disorders, thought disorders, eating disorders, Obsessive-Compulsive Disorder, Post-Traumatic Stress Disorder, Depersonalization (or Dissociative) Disorder, or Borderline Personality Disorder (Conterio et.al, 1998). At the present time, self-mutilation is not officially recognized as a disorder and is not listed in the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (Levenkron, 1998). It is often diagnosed as a feature of Borderline Personality disorder. Self-harm can also be associated with sexual abuse, low self-esteem, a poor physical image, and depression (Alderman, 1997).

A significant gap in research on self-cutting and other violence means that despite growing evidence, the problem is widespread (McLaughlin, Miller & Warwick, 1996). Many reports fail to produce accurate information on the characteristics of the population of self-mutilators (Ross & McKay, 1979).

Depression and Self-Mutilation in Adolescence

The association between depression and self-mutilation in adolescence is becoming more apparent. The motivating factors leading to self-injury often include depression, an escape from emptiness, and feelings of unreality (Favazza, 1996). According to Hawton, Kingsbury, Steinhart, James, and Fagg (1999) depression is a key factor associated with repetition of adolescent self-harm. Recent investigations have identified psychiatric disorders, most commonly Major Depression, in the majority of adolescents who have self-harmed (Hawton et. al, 1999).

It is difficult to understand how the pain of self-mutilation should relieve depression. Depression is amongst the most common of motives listed by patients to explain their acts and large proportions of self-mutilators are depressed before they

mutilate (Ross & McKay, 1979). If the depression is a consequence of guilt or anger, it may be that the self-mutilatory act appeases guilt or enables ventilation of anger (Ross & McKay, 1979). Many self-injurers suffer from frequents bouts of severe depression (Conterio et.al, 1998). They often lose touch with the despair at the root of depression, as self-injury develops into a strategy for blotting feelings out of their conscious awareness (Conterio et.al, 1998).

McLaughlin et al., (1996), Conterio et. al, (1998), Ross & McKay, (1979), and Haines & Williams, (1997) have shown that depression is highly correlated with adolescents that self-mutilate. Often adolescents who self-mutilate have a combination of depressive disorder and an anxiety disorder to varying degrees (Levenkron, 1998). Adolescents engaging in acts of self-harm are likely to report feelings of depression and hopelessness (McLaughlin et. al, 1996). According to Cole (1989), depression was more of a predictor in self-harming ideation than hopelessness.

Depression is a key factor associated with the risk of repetition of self-mutilation (Hawton et. al, 1999). It is important to carefully assess depression in those adolescents who have harmed themselves. The importance of awareness of depression in self-mutilators is portrayed throughout this research. More careful screening for depression should be done and is the key factor in the overall assessment of adolescents who self-harm (Hawton et. al, 1999).

Statement of the Problem

The purpose of this study is to determine if a relationship exists between depression and self-mutilation in adolescents residing in a residential treatment facility.

In addition, this study will determine the difference between self-mutilation and gender, the difference between self-mutilation and age, and the difference between self-mutilation and length of stay at the treatment center.

Depression will be measured by participant's scores on the Beck Depression Inventory II (Beck, 1996). The self-mutilation variable will be measured by the scores on the Self-Harm survey (Conterio et.al, 1998) to determine if participants have or are currently self-mutilating.

The subjects in this investigation will be residents at a residential treatment center for adolescents. The participants will complete both the BDI II and the Self-Harm survey. Scores on each self-report inventory will be compared to determine whether a correlation exists.

Hypotheses

Four null hypotheses are proposed in this study. They are as follows:

Ho1: There will be no correlation between scores on the Beck Depression Inventory II (BDI II) and the Self-Harm survey.

Ho2: There will be no statistically significant difference between the occurrence of self-mutilation and gender.

Ho3: There will be no statistically significant difference between the occurrence of self-mutilation and age.

Ho4: There will be no statistically significant difference between the occurrence of self-mutilation and length of stay at the residential treatment center.

The alternative hypothesis for this study is that there is a positive correlation between depression and self-mutilation in adolescents residing in a residential treatment center. Also, there are statistically significant differences between the occurrence of self-mutilation and gender, the occurrence of self-mutilation and age, and the occurrence of self-mutilation and length of stay at the residential treatment center.

Definition of Terms

Borderline Personality Disorder: A diagnostic term used to refer to a pervasive pattern of instability of interpersonal relationships, self-image, and affects, and marked impulsivity beginning by early adulthood and present in a variety of contexts.

Depression: A general term used to refer to a depressed mood most of the day, nearly every day, as indicated by either subjective report or observations made by others.

Residential Treatment Facility: A term used to describe a residential center that concentrates on delivering therapeutic services to the residents while providing for the basic needs of the residents.

Self-Mutilation: A term used to refer to the recurrent cutting or burning of one's skin; a sense of tension present immediately before the act is committed; relaxation, gratification, fear of social stigma, causing the individual to attempt to hide scars, blood, or other evidence of pleasant feelings, and numbness experienced with the physical pain; and a sense of shame and the acts of self-harm.

Trichotillomania: A term used to describe the recurrent pulling out of one's own hair that results in noticeable hair loss.

Manic Episode: A term used to describe a period time in which an abnormal and persistently elevated, expansive, or irritable mood occurs.

Major Depressive Episode: A term used to describe a depressed mood that is present during the same two week period and represents a change from previous functioning.

Mixed Episode: A term used to refer to a period of time in which criteria are met for a Manic Episode and for a Major Depressive Episode.

CHAPTER II

Review of Literature

General Information

Levenkron, (1998), Conterio et.al, (1998), Alderman, (1997), Soloman & Farrand, (1996), and Hawton, Fagg, Simkin, Bale & Bond, (1997) have discussed the association between self-mutilation and an unstable emotional state in the adolescent population. This review will focus on the relationship between the occurrence of self-mutilation and the degree of depression in adolescence. Despite this focus on the importance of depression, however, there are also many other causal factors that influence the act of self-mutilation. The emotional state, background characteristics, DSM- IV diagnosis, coping methods, and establishing control are other relevant factors in self-mutilation. This review of literature focuses on the relation of depression and self-mutilation in adolescents.

Adolescence is a time of daily growing and changing for the individual encountering it. In adolescence, physical, emotional, intellectual, academic, social and spiritual development occur (Worchel & Shebilske, 1992). The period of development can be a very chaotic and challenging experience for the young individual.

An alarming aspect of self-mutilation is that this behavior is making an increasing appearance earlier and earlier in the adolescent years. The contagion phenomenon of self-mutilation is occurring because teens are learning about the behavior from one another, from the press, and from popular culture, and it is giving them ideas (Conterio et. al, 1998). Children are plunging into adolescence before their cognitive and emotional capacities have had a chance to adjust (Conterio et. al, 1998).

Self-Mutilation Characteristics

Self-mutilation is best defined as the intentional harm of one's own body without conscious suicidal intent, but the act has permanently altered or damaged one's body (Alderman, 1997). This behavior has been described as a low lethality, socially unacceptable self-injury performed in reaction to psychological crisis (Haines, Williams, Brain, & Wilson, 1995). Alderman (1997) has generated the following five characteristics of self-inflicted violence:

1) *Done to oneself*. This component describes an act done purposely to oneself because he/she is the recipient of his/her own abuse. A person has to do something harmful to himself/herself for an act to be considered one of self-inflicted violence. An example of this is when a person burns himself/herself with a cigarette.
2) *Performed by oneself*. This component is when an individual does something that injures himself/herself. The pain is not caused by another person but is induced by the individual. An example of this would be sticking themselves with pins, needles, or nails.
3) *Physically violent*. This component described the act that causes noticeable physical damage. It must include some type of physical violence such as hitting, cutting, or burning. This physical violence causes some kind of pain or injury to the individual's body.
4) *Not suicidal*. This component describes how self-inflicted injury is not performed with the intention to kill himself/herself. It is used as a way to cope and feel better to sustain life.

5) *Intentional and Purposeful*. This component describes that people who engage in the behavior hurt themselves on purpose. These occurrences are not accidental and in many cases it follows a ritualistic pattern. These patterns are in no way coincidental but instead they are purposeful and intentional. (Alderman, 1997).

Self-mutilation can be performed through a variety of different methods. Some of the most common methods include: cutting skin, hitting oneself; extracting hair to excess; head banging; scratching to excess; biting oneself; burning oneself; interfering with the healing of bones; breaking bones; chewing the lips, tongue, or fingers; eye enucleation (removal); amputation of limbs, breasts, digits, genitals; facial skinning, and ingesting sharp or toxic objects (Conterio et.al, 1998). About seventy five percent of injurers use more than one method (Conterio et.al, 1998). The two most common forms of self-mutilation have been found to be cutting and burning oneself (Favazza & Conterio, 1989).

The individual who chooses to self-mutilate is often someone who experiences himself/herself as powerless. This person may not be docile, timid, or shy in public but rather he/she may be quite outgoing. A self-mutilator is often plagued by fear of punishment for being deficient, inadequate, a disappointment in a way that was either specifically defined for him/her, or one that is unspoken but understood (Levenkron, 1998). The self-mutilator is often perceived as a likable and high-achieving person by his/her peers. Often only the individual knows that they are “different” from other people.

Significance of Self-Mutilation

There are a variety of explanations that self-mutilators use as justification for this behavioral occurrence. Individuals who self-mutilate often adopt the behavior because they have no other means with coping with their problems (Walsh & Rosen, 1988). Self-mutilation also is used to express emotion, to deal with feelings of unreality or numbness, to make flashbacks stop, to punish the self and stop self-hating thoughts, or to deal with a feeling of impending explosion (Martinson, 1998). There are a number of characteristics that are common among self-mutilators: they have difficulties in various areas of impulse control; a low capacity to form and sustain stable relationships; fear of change; an inability or unwillingness to take adequate care of themselves; low self-esteem; a traumatic childhood history; and rigid, all-or-nothing thinking (Conterio et.al, 1998).

The sight of blood appears to have significance in the self-mutilation process. When instant relief is not felt often self-mutilators will continue to cut until there is enough blood to facilitate change in their mood (Haines et. al, 1995). “Blood letting” is described as letting the bad blood out to expel badness and tension (Strong, 1998). With a few strokes of the razor, a self-mutilator may unleash the symbolic process in which their sickness is removed and the healing is evidenced by a scar (Favazza, 1987).

According to Conterio et. al (1998), the purpose of self-injury falls under two broad headings: analgesic or palliative aims and communicative aims. Analgesic or palliative aims include the physical calming that most patients experience when they self-mutilate. Self-injury makes people think that they are in control and this feeling temporarily boosts their morale. Self-injury also makes people feel “cleansed” as if they are ridding themselves from emotional toxins. Communicative aims are those people use

to depict their emotional state and express wishes, needs, and desires. They use it to communicate with themselves and with other people. Self-injury can represent an act of vengeance, a reenactment of earlier abuse, or a desperate cry for help and compassion.

Self-mutilation is not classified as a distinct DSM-IV diagnosis. The self-injurious behavior remains a secondary feature to the primary disorder (Levenkron, 1998). The DSM-IV divides diagnostic categories into two broad groups: clinical disorders are known as Axis I conditions, and personality disorders are known as Axis II conditions (Conterio et. al, 1998). The Axis I diagnoses associated with self-mutilation include: depression, panic disorder, obsessive-compulsive disorder, post-traumatic stress disorder, and dissociative disorder (Martinson, 1998). The Axis II diagnoses associated with self-mutilation include: borderline personality disorder, dependent personality disorder, paranoid personality disorder, narcissist personality disorder, and histrionic personality disorder (Conterio et.al, 1998).

The disorder most frequently linked to individuals who self-harm is borderline personality disorder, an Axis II condition (Alderman, 1997). However, for this diagnosis to be fully accurate, at least four of the following symptoms must accompany self-mutilation: a pattern of unstable and intense interpersonal relationships; impulsiveness; abrupt mood swings; inappropriate, intense anger; identity disturbance (uncertainty about self-image, sexual orientation, long-term goals, friends, and values); chronic feelings of emptiness or boredom; or frantic efforts to avoid abandonment (Conterio et.al, 1998). For people with Borderline Personality Disorder self-mutilation serves several functions. Self-mutilation is a response to overwhelming psychological pain and it is a method of relieving and releasing some of those feelings (Alderman, 1997). It also serves as a

method to prevent their feelings from emerging further. The wounds from self-mutilation allow a transfer of attention from the original distress to the new emotions resulting from the self-mutilation (Alderman, 1997).

Three Forms of Self-Mutilation

Self-mutilation can be classified into three different types: major, stereotypic, and superficial or moderate. The first type, major self-mutilation, refers to infrequent acts in which a significant amount of body tissue is destroyed (Favazza & Rosenthal, 1993). This is the rarest and most extreme form of self-mutilation. Major self-mutilation usually results in permanent disfigurement with such acts as eye enucleation, castration, and limb amputation (Conterio et.al, 1998). This type is often associated with an associated feature of psychosis (acute psychotic episodes, schizophrenia, mania, depression), acute alcoholic and drug intoxications, and transexualsim (Conterio et.al, 1998).

The second type of self-mutilation is stereotypic self-mutilation. This type compromises acts that have a fairly fixed pattern of expression, seem to be devoid of symbolism, and are often rhythmic (Favazza & Rosenthal, 1993). Examples of this type include; head banging, hitting, orifice digging, arm hitting, throat and eye gouging, self-biting, tooth extraction and joint dislocation (Favazza, 1998). It is difficult of discern symbolic meaning or specific thought content to these behaviors because they most often occur in moderate to severely mentally retarded persons as well as in cases of autism and Tourette's syndrome (Strong, 1998).

The third and most common type of self-mutilation is superficial/moderate self-mutilation. This type usually begins in early adolescence and is found throughout the world in all social classes (Strong, 1998). Superficial/moderate self-mutilation refers to

acts of low lethality that results in relatively little tissue damage and occurs sporadically or repetitively (Favazza & Rosenthal, 1993). This type of self-mutilation represents symbolic meaning to the individual. Superficial/moderate is the most common type of self-mutilation with a prevalence of at least 1 per 1,000 per year (Favazza, 1998). Example of superficial/moderate self-mutilation include: trichotillomania, nail biting, skin picking and scratching, skin carving, cutting, burning, needle sticking, bone breaking, and interference with wound healing (Favazza & Rosenthal, 1993). Skin cutting and burning that occur episodically are the most common of all self-mutilative behaviors and are a symptom or associated feature in a number of mental disorders such as borderline, histrionic, and antisocial personality disorder, posttraumatic stress disorder, dissociate disorders, and eating disorders (Strong, 1998). Episodic becomes repetitive self-mutilation when the behaviors become an overwhelming preoccupation (Favazza, 1998). Repetitive self-mutilators may adopt the identity of a "cutter" or "burner" and described themselves as addicted to self-harm (Favazza, 1998). These repetitive self-mutilators do not want to die but they may become demoralized, depressed, and suicidal because they cannot control their self-mutilation and because they feel that no one truly understands what they are enduring (Strong, 1998).

Self-mutilation in Adolescence

Self-mutilation typically begins in adolescence. It then escalates or becomes more frequent during the early twenties and decreases or disappears in the thirties (Alderman, 1997). In this population of self-mutilators, most of these young people are often emotionally inarticulate and emotionally imperceptive (Levenkron, 1998). The lack of emotional security, as well as a real inability to express themselves emotionally with the

use of language (rather than acting out), leaves them in an emotional isolation, where life if lived at the defensive, survival level (Levenkron, 1998).

The alarming aspect of the rising tide of self-injury is that the behavior is making its appearance earlier and earlier in the childhood and adolescent years (Conterio et.al, 1998; McLaughlin et.al, 1996). It often starts as harmless "accidents" by a teenager. It then may manifest as adolescents' experiment with tattoos, body decoration or body piercings. Some adolescents say that they started self-mutilating after they accidentally cut themselves, then were surprised when they were flooded by feelings of relieved (Conterio et.al, 1998).

Self-mutilation serves a variety of purposes for adolescents. Adolescents who self-mutilate often use these acts to reduce their own feelings of frustration, anger, or anxiety, while at the same time communicating their feelings to others (Rosen, Barent, & Roden, 1990). Self-mutilation is also a method of coping for adolescents. This behavioral occurrence is a strategy of temporarily dealing with psychological factors. It also creates additional physical and psychological situations, such as physical trauma, shame, and guilt, with which these adolescents must contend (Alderman, 1997). There are also other factors that may be at the root of self-mutilation: a history of childhood physical of sexual abuse, illness or surgeries at a young age, or parents with alcoholism or depression (Strong, 1998). The self-mutilating adolescent often turns inward and away from others, abandoning any real emotional connection (Levenkron, 1998). This "inward turning" reduces the accurate sense of reality in general (Levenkron, 1998). This is a reason for the frequently accompanied mental illness amongst adolescents who self-mutilate.

The unhealthy parenting of a child is often a causal factor in the self-mutilating adolescent. Parental aggression towards the adolescent will often cause the individual to be simultaneously protective of and afraid of displeasing his/her parents (Levenkron, 1998). When this occurs, the adolescent will often blame himself/herself. This self-blame builds up for years before the self-retaliation, in the form of self-mutilation, begins (Levenkron, 1998). The nondissociative self-mutilating adolescent is one who suffers from intolerable rage with which he/she is only capable of attacking himself/herself (Levenkron, 1998). The other kind of adolescent self-mutilator, the dissociative, feels disconnected from his/her parents, from others, and ultimately from himself/herself (Levenkron, 1998).

Depression Characteristics

Depression may be best understood as a chronic mood disorder characterized by persistent feelings of sadness, hopelessness, and irritability (Silverstein, Silverstein, & Nunn, 1997). It is an occurrence in people of all ages, races and both sexes. Depression is often described as a state of mind and body which is characterized by a change in mood towards being miserable, worried, discouraged, irritable, unable to feel emotion, fearful, despondent, hopeless or down in the dumps (Winokur, 1981).

According to the American Psychiatric Association's Diagnostic and Statistical Manual for Mental Disorders (4th edition, 1994), also known as the DSM-IV, a major depressive disorder is diagnosed if at least five (or more) of the following symptoms are present during the same two week period and represent change from previous functioning:

1. A depressed mood most of the day, nearly every day, as indicated by either subjective report or observation made by others.
2. Marked diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day (as indicated by either subjective account or observation by others).
3. Significant weight loss when not dieting or weight gain (a change of more than 5% of body weight in a month), or decrease or increase in appetite nearly every day.
4. Insomnia or hypersomnia nearly every day.
5. Psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of restlessness or being slowed down).
6. Fatigue or loss of energy nearly every day.
7. Feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not merely self-reproach or guilt about being sick).
8. Diminished ability to think or concentrate, or indecisiveness, nearly every day (either by subjective account or as observed by others).
9. Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide.

In order to be diagnosed with depression, the following characteristics must also be present:

- The symptoms do not meet criteria for a Mixed Episode.
- The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- The symptoms are not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition.

- They symptoms are not better accounted for by Bereavement, i.e., after the loss of a loved one, the symptoms persist longer than 2 months or are characterized by marked functional impairment, morbid preoccupation with worthlessness, suicidal ideation, psychotic symptoms, or psychomotor retardation. (American Psychiatric Association, 1994).

According to the DSM-IV, there are many different forms of depression, with major depressive disorder being the most severe form (Silverstein et. al, 1997). Dysthymic disorder is a milder form of depression that continues for more than two years. Cyclothymic disorder is a form of depression that continues for at least two years with the presence of hypomanic symptoms. Another form of depression is known as manic-depression, or bipolar disorder. In this disorder, cyclic periods of depression alternate with exaggerated "highs" (Silverstein et. al, 1997). The final form of depression is seasonal affective disorder, also known as SAD. SAD is characterized by recurrent episodes of depression, influenced by the seasons of the year.

Depression has an estimated occurrence of affecting 17.6 million Americans each year (Silverstein et. al, 1997). Depression is more common among women than among men. Two-thirds of those who suffer from a depression disorder are women (Worchel & Shebilske, 1992). The prevalence of major depressive disorder or dysthymic disorder in the general population of children ranges from 2 –5% (Hersen & Ammerman, 1995). There are much higher rates of depression reported for children from psychiatric populations, children of depressed parents, medically ill youth, and children with educational and learning problems (Hersen & Ammerman, 1995).

Symptoms of depression, severity, and duration can vary greatly from person to person (Silverstein et. al, 1997). Some people experience more symptoms than others do. In adolescents, depression often becomes apparent through their behaviors. Depression in children and adolescents if often characterized by problems in school, oppositional behaviors (arguing, fighting, swearing), mood swings, antisocial behaviors (drug use, vandalism, unsafe sexual practices), low self-esteem, irregular sleeping patterns, and weight fluctuation (Beckham & Leber, 1995).

Depression and Self-Mutilation in Adolescence

Self-mutilation from a psychodynamic perspective is viewed as an action rooted in depression (Alderman, 1997). This theory portrays that depression is anger directed toward oneself (Alderman, 1997). From this perspective, self-mutilation in adolescence is an expression of anger. These adolescents hurt their body by punishing themselves through self-mutilation and communicating an intense sense of anger. When this suppressed anger and depression becomes too much for the adolescent to cope with, the adolescent will self-harm out of the intensity of his/her frustrations as an outlet (Levenkron, 1998).

A study by Pattison and Kahan (1983), reformulated the self-harm syndrome by determining a number of characteristics present in adolescents who participated in self-mutilatory behaviors. The predominant symptoms associated with self-harm were despair, anxiety, anger, cognitive constriction, lack of social support, psychosis and depression. A large majority of these symptoms were determined to be a factor in those adolescents who self-mutilated.

Depression in adolescents was also found to be a key determinant as an influential preceding factor before the act of self-mutilation was performed (Haines, Williams, Brain, Wilson, 1995). Often adolescents will utilize self-mutilation as a coping strategy to deal with the depression they are enduring. Among the adolescent population, self-mutilation is considered an effective, maladaptive coping strategy to deal with their feelings (Haines et.al, 1995). This self-mutilatory act is often perceived as a tension reliever, which in return reinforces the continued use of the behavior. It is also perceived by adolescents as a coping strategy for blotting out feelings of their conscious awareness (Conterio et.al, 1998).

Certain ethnic backgrounds must be taken into account because of the incidence of self-harm and the factors associated with it amongst them. Asian adolescents were more socially isolated than their Caucasian peers and they had higher rates of depression, hopelessness, longer premeditation times and more occurrences of self-harm (Goddard, Subotsky & Fombonne, 1996). Amongst the African-American adolescents, social stressors were more of a causal factor than depression for the occurrence of self-harm. (Goddard et. al, 1996).

A study that investigated the relation between self-mutilation and the role of psychological factors found that depression, hopelessness, impulsivity, self-esteem, and trait and state anger were all influential determinants of the repetition of self-mutilation (Hawton et. al, 1999). The degree of depression and hopelessness was much more frequent and severe in the adolescents that self-mutilated. Among all of these psychological factors, depression was found to be a key factor associated with the occurrence of self-harm (Hawton et. al, 1999). In another study by Cole (1989),

depression rather than hopelessness predicted self-harming ideation and attempts in a group of adolescent students. After the precipitating factor of depression had set in, these adolescents were found to report feelings of hopelessness about their future (Cole, 1989).

The implications of the relation between depression and self-mutilation are important in terms of the prevention and awareness of future harmful behaviors. This state of emotional turmoil has been shown throughout this research to have detrimental effect on the intensity and duration of self-mutilation in adolescence. Given the evidence of high rates of depression and depressive disorders contributing to the occurrence of self-mutilation in adolescents, this study will investigate what correlation exists between depression and self-mutilation of adolescents residing in a residential treatment facility.

CHAPTER III

Methodology

Introduction

This chapter will describe the participants and how they were selected for the inclusion of this study. In addition, the instruments being used to collect information will be discussed as to their content, reliability, and validity. The procedures for data collection and analysis will then be presented. Methodological limitations will also be included.

Participants

This study was conducted in the spring of 2001 using participants residing at a residential treatment facility in the western region of Wisconsin. One hundred and ten children and adolescents with emotional or behavioral difficulties were asked to participate. After parental/guardian permission had been granted, 46 individuals successfully completed the self-report inventories. Ages of these participants ranged from 11-17, the mean age of 15. Ethnic minority participants made up 52% of the sample, while Caucasian participants consisted of 48%. Females made up 37% of the sample; males made up 63%.

Instrumentation

To measure to level of depression within the participants, the Beck Depression Inventory II (BDI II) was utilized. The original Beck Depression Inventory (BDI) scale was developed in 1961 and was revised and published as the BDI II in 1994

(Beck, 1996). This scale is a self-report instrument composed of 21 items assessing the severity of depression in adults and adolescents. The items yield a score with a variation of zero to three. The item responses are summed to yield total scores ranging from 0 to 63, with higher scores indicating greater severity of depression. A total score ranging from 0 to 13, indicates minimal depression; from 14 to 19 indicates mild depression; 20 to 28 indicates moderate depression and 29 to 63 indicates severe depression.

The internal consistency reliability for the BDI II is represented by coefficient alphas between .92 and .93. These coefficient alphas are higher than those of the BDI (Beck et. al, 1996). The Pearson product-moment correlation represented by the test-retest scores was reported at .93 ($p<.001$) (Beck et. al, 1996).

The BDI II was developed to assess the depressive symptoms listed as criteria for depressive disorders in the DSM-IV. The BDI was revised and called the BDI II after items were reworded and new items added to assess more fully the DSM-IV criteria for depression. The construct and concurrent validity of the BDI was supported by being one of the most widely used and accepted instruments for assessing the severity of depression in psychiatric populations (Beck et. al, 1996).

To measure the occurrence of self-mutilation, the Self- Harm survey, designed by the researcher was used. Questions were taken from the book, *Bodily Harm* by Conterio and Lader (1998), and constructed into the survey. The Self-Harm survey is a 15 item, multiple-choice questionnaire, designed to assess whether the participants were or are currently self-harming. The 15 likert type items were answered according to the response of strongly agree, disagree, neutral, agree, and strongly agree.

The degree of reliability in the Self-Harm survey has not yet been established, but this instrument has content validity, as derived from a professional resource (Conterio et. al, 1998). This instrument was reviewed by the thesis advisor and was also approved and deemed appropriate by the Human Research Subjects Committee at the University of Wisconsin Stout.

Procedures

The children or adolescents were asked to participate after permission had been granted by the parents/guardians of each individual. Each participant was given an overview of the study and was informed that participation was strictly voluntary and confidentiality was emphasized. The therapist assigned to each participant administered the Beck Depression Inventory II and the Self-Harm survey during the participant's individual therapy time. Twenty minutes were allowed for participants to complete both questionnaires. Upon completion of the questionnaires, the therapist returned them to the researcher in a sealed envelope.

Data Analysis

The data for this study was analyzed by using Pearson's *r* correlation coefficient. Depression scores were correlated against self-harm scores to determine if any significant relationship exists.

Three t-tests for independent means were utilized to determine if there were any statistically significant differences between the occurrence of self-mutilation and gender (male or female), the occurrence of self-mutilation and age (fourteen and younger or

fifteen and older), and the occurrence of self-mutilation and the length of stay at the residential treatment center (six months or less or seven months or more). The means and standard deviation for these variables were also determined.

Limitations

Methodological limitations of this study are as follows:

1. The generalizability of these results may be limited because this study was conducted using an inpatient sample of children and adolescents.
2. The use of volunteers may not accurately represent all children and adolescents residing at this residential treatment facility.
3. The reading level of this instrument may have been difficult and not all questions may have been understood by the participants.
4. Due to the relatively small sample size, the results of this study may be viewed as tentative.
5. The reliability of the Self-Harm survey has not yet been shown to consistently measure the occurrence and degree of self-mutilation.
6. Not all of the therapists may have administered the questionnaires uniformly and other differences may have been present in the administration procedure.

CHAPTER IV

Results

Introduction

This chapter will present the results of this study, which investigated the relationship between depression and self-mutilation. In addition, this section will also present data pertaining to findings related to individual items that were found to be statistically significant.

Findings

Ho1: There will be no correlation between scores on the Beck Depression Inventory II (BDI II) and the Self-Harm survey.

Data analysis rejects the first null hypothesis. There is a positive correlation between BDI II and Self-Harm survey scores within the population of adolescents at a residential treatment facility. The correlation coefficient was found to be .566, which is significant at the $p<.001$ level (see Table 1). Therefore, the first null hypothesis was rejected.

Table 1
Correlation between BDI II and Self-Harm survey scores

	Self-Harm score	BDI II score
Self-Harm score	1.000	.566*
BDI II score	.566*	1.000

*Significant at $p<.001$

Ho2: There will be no statistically significant difference between the occurrence of self-mutilation and gender.

The means and standard deviations of the two groups, male and female participants, compared with the occurrence of self-mutilation were computed and results are presented in Table 2. The data indicates that the females scored slightly higher on occurrence of self-mutilation (M = 2.41) than did the males (M = 1.97). Both of these scores indicated a mild level of the occurrence of self-mutilation within a population of adolescents in a residential treatment facility. The t score indicates no significant difference between females and males (t = .799) in this behavioral occurrence. These findings provide support for the second null hypothesis in this study, therefore the null hypothesis is accepted (see Table 2). Therefore the second null hypothesis can not be rejected.

Table 2
Means and Standard Deviations and t-test for Males and Females and the Occurrence of Self-Mutilation

Variable	N	M	SD	t	p
Male	29	1.97	1.90	.799	.429
Female	17	2.41	1.70		

Ho3: There will be no statistically significant difference between the occurrence of self-mutilation and age.

Data analysis indicates no significant difference between the adolescents 14 and younger and 15 and older in the occurrence of self-mutilation. Adolescents 14 and younger scored slightly higher (M = 2.45) than did those 15 and older (M = 2.03). Both of these scores indicate mild occurrence of self-mutilation of adolescents residing in a

residential treatment facility. The t score indicates no statistically significant difference between adolescents 14 and younger and those 15 and older (t = .673) in the occurrence of self-mutilation. These findings provide support for the third null hypothesis in this study, therefore the null hypotheses is not rejected (see Table 3).

Table 3
Means and Standard Deviations and t-test for Adolescents 14 and Younger and Adolescents 15 and Older and the Occurrence of Self-Mutilation

Variable	N	M	SD	t	p
14 and Younger	11	2.45	2.21	.673	.505
15 and Older	35	2.03	1.71		

Ho4: There will be no statistically significant difference between the occurrence of self-mutilation and length of stay at the residential treatment facility.

Data analysis indicates no statistically significant difference between adolescents who have stayed at the treatment facility for less than six months or those who have stayed there seven months or longer. Adolescents who have stayed at the residential treatment facility 7 months of longer scored slightly higher (M = 2.20) than those adolescents who have been at the treatment center 6 months or less (M = 2.13) in the occurrence of self-mutilation. These mean scores indicate mild occurrence of self-mutilation within a population of adolescents residing in a residential treatment facility. The t score indicates no significant difference between those who have been there 6 months or less and those there 7 months or longer (t = .114). These findings provide

support for the fourth null hypothesis, therefore the null hypothesis can not be accepted (See Table 4).

Table 4
Means and Standard Deviations and t-test for Adolescents' Length of Stay in Residential Treatment Facility for 6 Months or Less and 7 Months or Longer

Variable	N	M	SD	t	p
6 Months or Less	30	2.13	1.78	.114	.910
7 Months or Longer	15	2.20	2.01		

Significant findings were not found in the t-tests in this study. However some other individual items did have significant findings. Data analysis indicates that female adolescents scored significantly higher (M = 3.65) than males (M = 2.62) on not wanting others to know the first time they self injured (Self-Harm survey item #11). The p score indicates a significantly significant difference between the two groups (p = .032), which is significant at the $p<.05$ level (see Table 5).

Table 5
Means and Standard Deviations and t-test for Males and Females and Not Wanting Others to Know When They Self-Harmed

Variable	N	M	SD	t	p
Male	29	2.62	1.47	2.221	.032
Female	17	3.65	1.58		

One other individual item demonstrated a significant finding in this study. Adolescent males scored significantly higher (M = 1.52) than the adolescent females

(M = .82) on the feeling of being punished (BDI II item #6). The p score indicates a significantly significant difference between the two groups (p = .012), which is significant at the p<.05 level (see Table 6).

Table 6
Means and Standard Deviations and t-test for Males and Females and the Feeling of Being Punished

Variable	N	M	SD	t	p
Male	29	1.52	1.06	2.629	.012
Female	17	.82	.73		

Summary

Data analysis revealed a high correlation between the degree of depression and the occurrence of self-mutilation, as measured by scores on the Beck Depression Inventory II (BDI II) and the Self-Harm survey. Although the adolescent male and female groups differed slightly in the occurrence of self-mutilation, there were no statistically significant findings. There was also a slight difference between age and the occurrence of self-mutilation, but no statistically significant differences between the two groups. No statistically significant differences were found between the adolescents who have been at the residential treatment facility 6 months or less and those there 7 months or more and the occurrence of self-mutilation. Overall, no significant findings in the t-tests were determined in this study. However some individual items were found to be significant. Specifically, it was determined that adolescent females scored significantly higher than adolescent males on not wanting others to know the first time they self-injured (Self-Harm survey item #11). Also, it was determined that adolescent males scored

significantly higher than the adolescent females on the feeling of being punished (BDI II item #6).

CHAPTER V

Summary, Conclusions, and Recommendations

This chapter provides a brief overview of the study, conclusions that were obtained, and future recommendations for research.

Summary

Adolescence is typically acclaimed as a time period in a young person's life in which many changes take place. This can be a very complex and difficult transitional period for these individuals. The task of adolescence is to leave childhood and begin forging and independent identity (Conterio et.al, 1998). Often adolescents will turn to self-mutilation as a way to fill the void in this transition. This destructive behavior often becomes a token of independence and symbol of separation (Conterio et.al, 1998).

Favazza and Rosenthal (1993) identified three types of self-mutilation: major self-mutilation, stereotypic self-mutilation, and superficial/moderate self-mutilation. The most common type of self-mutilation is superficial/moderate, which typically begins in adolescence and involves acts such as skin scratching, hair pulling, cutting, carving, burning and needle sticking. The importance of categorizing the types of self-mutilation is demonstrated by the clinical use in determining whether this act is associated with a certain mental disorder or just an associated feature (Strong, 1998).

A study by McLaughlin et. al (1996) shows that there are a variety of significant factors that underlie self-mutilation in adolescence. Poor relationships at home and school have been found to be contributing factors. Poor problem-solving abilities and feelings of hopelessness and depression were also found to be relevant to the adolescent who self-injured. This study found that adolescents who engaged in self-mutilation were more

likely to report feelings of hopelessness about their future, whether or not depression was also occurring (McLaughlin et. al, 1996). These feelings of hopelessness were directly related toward the areas of family, friends, and boyfriends or girlfriends.

Only one study has investigated the relation between depression and self-mutilation and found depression to be the key factor associated with the repetition of self-injury (Hawton et. al, 1999). The significance of the relation between depression and self-mutilation is important in terms of awareness and prevention of future self-mutilatory behaviors. Therefore, the purpose of the present study was to determine if there was a relationship between depression and self-mutilation. Adolescents residing in a residential treatment facility participated by completing two self-report inventories: the Beck Depression Inventory II (Beck, 1996) and the Self-Harm survey, derived from the professional resource Bodily Harm (Conterio et. al, 1998). Data analysis utilized the Pearson's *r* correlation coefficient to determine what correlation exists between depression and self-mutilation. In addition, this study examined the difference between gender, age, and length of stay at the residential treatment facility and the occurrence of self-mutilation. This was completed by utilizing three t-tests for independent means.

The results of the data analysis indicate there is a strong positive correlation between depression and the occurrence of self-mutilation. Analyses revealed no statistical differences found between gender and self-mutilation, age and self-mutilation, and length of stay at the treatment facility and self-mutilation. However, data pertaining to findings related to some individual items on the BDI II and Self-Harm survey were found to be statistically significant. Specifically, it was determined that adolescent females scored significantly higher than adolescent males on not wanting others to know the first time

they self-injured (Self-Harm survey item #11). Also, it was determined that adolescent males scored significantly higher than the adolescent females on the feeling of being punished (BDI II item #6).

Conclusions

The reviewed literature suggests that there are a variety of contributing factors related to the occurrence of self-mutilation. These factors were found to be hopelessness, depression, relationship problems, poor problem-solving skills and other mental illnesses. These characteristics can often occur during the transitional period of adolescence, and can be a possible indicator for the transpiration of self-mutilation.

This study expands the literature about causal characteristics associated with the occurrence of self-mutilation in adolescence. Self-mutilatory behaviors are done to oneself, performed by oneself, and are often intentional and purposeful. These youths engaging in this destructive behavior may utilize self-mutilation as a method of sustaining life and coping with an emotionally difficult time. For others, self-mutilation may be used as a way to physically express and release their tension and emotional pain. This destructive act may place the individual at greater risk for harming themselves, thus it may elicit referral or placement in a residential treatment facility.

Adolescents residing in this residential treatment facility often have behavioral and/or emotional difficulties for which this placement is necessary. This study has illustrated that those individuals who are hopeless and depressed due to problems in their life often participate in self-mutilation. The high correlation between depression and self-mutilation is not surprising due to the fact that these adolescents often feel pessimistic about their future. Most of the adolescents at this residential treatment facility have dealt

with abuse, dysfunctional relationships, mental illness, and other unsatisfactory circumstances in their life. These factors all contribute to the possible risk of developing or exacerbating the occurrence of self-mutilation.

It is not surprising that these adolescents in residential treatment participate in self-mutilatory acts as a method of coping and adapting to their new environment. Often these residents may use self-mutilation as a method of negative attention seeking to get attention from their peers and the staff. They may also see other peers self-mutilating as a method of dealing with their problems and decide to try it themselves. It is also possible that these youth may utilize self-mutilation as a way to escape the reality of themselves, their future, and the environment. Depression can often occur when an individual has not adapted to the changes in the environment in which he or she is living. Often this occurs when an adolescent is removed from his or her own environment and placed in a residential treatment center. These adolescents may utilize self-mutilation as a way to cope with depression because of the unfamiliar surrounding.

No statistically significant differences were found between gender and self-mutilation. This finding was surprising due to much of the reviewed literature discussing females as more frequently participating in this behavior. Perhaps the unequal distribution of female participants in this study may have been a contributing factor to this finding. There were also no significant differences between age and self-mutilation. This finding may be supported by the notion that self-mutilation most frequently occurs in adolescence and all of the residents at the residential treatment facility are of that age. The research did not support that any certain age was more at risk, but instead it encompassed all of the adolescent years at risk for this dangerous occurrence. There were

no statistically significant differences between the length of stay at the residential treatment center and the occurrence of self-mutilation. Research did not support that the time length at a residential treatment facility was an influential factor. The influence of length of stay may vary according to each individual. This study determined that adolescent females did not want others to know the first time they self harmed more than the adolescent males. This may be influenced by the conditions of the environment in which they live. There was also a statistically significant difference that determined that males felt that they were being punished more than the females. This finding may be supported by how the males and females perceived they were being treated at the residential treatment center.

Recommendations

This study provides some useful data regarding the relationship between depression and self-mutilation. Although there have been many studies on the role of psychological factors in the occurrence of self-mutilation, as delineated in the literature review, there have been few to combine depression and self-mutilation. This suggests a need for further research and evaluation of the association between depression and self-mutilation. Given that this study yielded a high positive correlation between depression and self-mutilation, it could reveal a new awareness of depression as a detrimental determinant of self-mutilation. It also could be used for the prevention of future destructive behaviors that could result in the placement in residential treatment facilities.

More specifically, therapists who work with individuals who self-mutilate must take the time to establish rapport with the individual in order for therapy to be effective. It is important that therapists react to self-mutilation in a nonjudgmental manner and

maintain appropriate boundaries with individuals whom self-mutilate. Specifically, cognitive techniques could be utilized so that the individual with depression may be oriented to the present and recognize the cognitive distortions that he/she is utilizing to maintain this "depressive" situation. The behavioral technique of creating a contract to not self-harm may be an effective strategy. This contract is a way of decreasing the likelihood that the individual will engage in the self-injurious behavior.

Replication of this study is highly recommended. Additional knowledge could be obtained by having a larger, more varied sample of participants from numerous residential treatment facilities and/or individuals in a psychiatric hospital. It would also be beneficial to have a more equally distributed representation from both genders.

Another recommendation is that future research examine the specific longitudinal process involved in the continuation of self-injurious behavior. The fact that no statistical differences were found due to length of stay at the residential treatment center, indicates that future research is needed to fully understand the duration and frequency of self-mutilation.

The fact that few studies have focused on depression as the key causal factor associated with self-mutilation indicates that future research is needed to fully understand the impact of depression. The influence of depression on an adolescent can be very detrimental; thus the awareness of it should be considered an important preventative factor. Future research could also be done to determine other ways in which awareness, prevention, and intervention strategies can be used to decrease the occurrence of self-mutilation.

References

Alderman, T. (1997). The Scarred Soul: Understanding and ending self-inflicted violence. Oakland: New Harbinger.

American Psychiatric Association. (1994). Diagnostic and statistical manual of mental disorders. (4th ed.). Washington, DC: Author.

Beck, A. T., (1996). Beck Depression Inventory II. San Antonio, TX: The Psychological Corporation.

Beck, A. T., Steer, R. A., Brown, G. K., (1996). Manual for the Beck Depression Inventory II. San Antonio, TX: The Psychological Corporation.

Beckham, E., & Leber, W. (1995). Handbook of Depression. (2nd ed.). New York, NY: Guilford Press.

Cole, D. A. (1989). Psychopathology of adolescent suicide: hopelessness, coping beliefs and depression. Journal of Abnormal Psychology, 98 248-255.

Conterio, K., Lader, W., & Bloom, J. (1998). Bodily Harm. New York, NY: Hyperion.

Favazza, A. R. (1987). Bodies under siege: Self-mutilation in culture and psychiatry. Baltimore: Johns Hopkins University Press.

Favazza, A. R., & Conterio, K. (1989). Female habitual self-mutilators. Acta Psychiatrica Scandinavica, 79, 283-289.

Favazza, A. R., & Rosenthal, R. (1993). Diagnostic issues in self-mutilation. Hospital and Community Psychiatry, 44, 134-140.

Favazza. A. R. (1996). Bodies under siege: Self-mutilation and body modification in culture and psychiatry. Baltimore: Johns Hopkins University Press.

Favazza, A. R. (1998). The coming of age of self-mutilation. The Journal of Nervous and Mental Disease, 186(5), 259-268.

Feldman, M. D. (1998). The challenge of self-mutilation: A review. Comprehensive Psychiatry, 29, 252-269.

Goddard, N., Subotsky, F., & Fombone, E. (1996). Ethnicity and adolescent deliberate self-harm. Journal of Adolescence, 19, 513- 521.

Grunebaum, H., & Klerman, G. (1967). Wrist slashing. American Journal of Psychiatry, 124, 527-534.

Haines, J., & Williams, C. (1997). Coping and problem solving of self-mutilators. Journal Of Clinical Psychology,53 177-186.

Haines, J., Williams, C., Brain, K., & Wilson, G. (1995). The psychophysiology of self-mutilation. Journal of Abnormal Psychology, 104 (3), 471-489.

Hawton, K., Fagg, J., Simkin, S., Bale, E., & Bond, A. (1997). Trends in deliberate Self-harm in Oxford. British Journal of Psychiatry, 171, 556-560.

Hawton, K., Kingsbury, S., Steinhart, K., James, A., & Fagg, J. (1999). Repition of deliberate self-harm by adolescents: the role of psychological factors. Journal of Adolescence, 22, 369-378.

Hersen, M., & Ammerman, R. (1995). Advanced Abnormal Child Psychology. Hillsdale, NJ: Lawrence Erlbaum Associates.

Hoghughi, M. (1992). Assessing Child and Adolescent Disorders. Newbury Park, CA: Sage Publications.

Levenkron, S. (1998). Cutting: Understanding and overcoming self-mutilation. New York, NY: W. W. Norton and Company.

Martinson, D. (1998). Why do people deliberately injure themselves? Retrieved on March 12, 2001 from the World Wide Web: http://www.palace.net/~llama/psych/why.html.

Martinson, D. (1998). Diagnoses associated with self-injury. Retrieved on July 12, 2000 from the World Wide Web: http://www.palace.net/~llama/psych/diag.html .

McLaughlin, J., Miller, P., & Warwick, H. (1996). Deliberate self-harm in adolescents: the role of psychological factors. Journal of Adolescence, 22, 369-378.

Novotony, P. (1972). Self-cutting. Bulletin of the Menniger Clinic, 36, 505-514.

Pattison, E. M., & Kahan, J. (1983). The deliberate self-harm syndrome. American Journal of Psychiatry, 140, 867- 872.

Rosen, P., Barent, W., & Rode, S. (1990). Interpersonal loss and self-mutilation. Suicide and life-threatening behavior, 20, 177-184.

Rosenthal, R. J., Rinzler, C., Wallsh, R., & Klausner, E. (1972). Wrist cutting syndrome: The meaning of the gesture. American Journal of Psychiatry, 128, 1363-1368.

Ross, R., & McKay, H. (1979). Self-Mutilation. Lexington, MA: D. C. Health & Company.

Silverstein, A., Silverstein, V., & Nunn, L. (1997). Depression. Springfield, NJ: Enslow Publishers.

Simpson, M.A. (1975). The phenomenon of self-mutilation in a general hospital setting. Canadian Psychiatric Association Journal, 16, 429-434.

Simpson, M. A. (1976). Self-mutilation. British Journal of Psychiatry, 16, 430-438.

Solomon, Y., & Farrand, J. (1996). Why don't you do it properly? Young women who self-injure. Journal of Adolescence, 19, 111-119.

Strong, M. (1998). A Bright Red Scream. New York, NY: Penguin Putnam Inc.

Walsh, B. W. & Rosen, P. M. (1988). Self-Mutilation: Theory, Research, and Treatment. New York, NY: Guilford Press.

Worchel, S., & Shebilske, W. (1992). Psychology Principles and Applications. (4th ed.) Englewood Cliffs, NJ: Prentice Hall.

Winokur, G. (1981). Depression: The facts. Oxford: Oxford University Press.